## REMARKS

Reconsideration and allowance are respectfully requested in view of the foregoing amendments and the following remarks

Claims 1-14 remain pending Claims 1-3, 6, 8-10, and 13 stand rejected under 35 USC 103(a) as being unpatentable over Hatano et al (US Patent No 5,998,810), hereinafter "Hatano" Claims 45- and 11-12 stand rejected under 35 USC 103(a) as being unpatentable over Hatano in view of Okazaki (US Patent No 5,990,500) Claims 7 and 14 stand rejected under 35 USC 103(a) as being unpatentable over Hatano in view of JP 03263878A

The principles of the present invention are generally directed to a flip-chip light-emitting device As understood in the art, a flip-chip light does not include a soldering pad in the main light-emitting surface The flip-chip light-emitting device has an electrode that is opposite to the main light emitting surface (a surface of the transparent substrate 31) and has good reflectivity of light The light directed to the electrode, therefore, can be reflected by the electrode to the outside through the transparent substrate, and thus substantially increases the light-emitting efficiency of the whole device Further, the electrode can have sufficient size and thickness to provide effective current spreading effect, such that the light-emitting diode is able to achieve its best light-emitting result

Hatano is generally directed to a semiconductor light-emitting diode having a P-type semiconductor layer formed on a light-emitting layer The light-emitting diode of Hatano is that of an edge emitting device, which is substantially different from a light-emitting device as claimed by Applicants as understood in the art

Regarding the rejection of claims 1-3, 6, 8-10, and 13 under 35 USC 103(a) as being unpatentable over Hatano, Applicants respectfully traverse the rejection With respect to independent claim 1 and dependent claim 6, Applicants claim a "**flip-chip light-emitting device**, comprising a first electrode and a second electrode wherein said second electrode **has good reflectivity of light** " Hatano, as discussed, is directed to an **edge emitting device** and not a flip-chip light emitting device The illustration of FIGURE 14 of Hatano and corresponding description, as cited in the Office Action on page 2 in section 2, are related to the edge-emitting semiconductor and not a light-emitting device. It is well known in the art that the structure of an edge-emitting semiconductor laser is different from that of a light-emitting device In the edge-emitting semiconductor laser device is illustrated in FIGURE 14 of Hatano, the laser light is emitted to the outside in the direction into the paper That is, the light emitting direction is perpendicular to the sapphire substrate layer 701 and the electrode layer 722 of FIGURE 14 Since the main light-emitting surface is perpendicular to the electrode layer 722, the electrode 722 cannot reflect the light directed to the outside through the main light-emitting surface Therefore, it is unnecessary for the electrode 722 to be reflective and, accordingly, Hatano does not teach that the electrode 722 has "good reflectivity".

Hatano suggests that the electrode 722 can be made of Al, Ag, Ni, Cr, Mg, Si, Zn, Be, Ge, In, Pd, or Sn (column 27, lines 43-44) However, among the above materials, Mg, Si, Zn, Be, In, and Sn are of bad reflectivity of light and does not teach or suggest having the electrode 722 of "good reflectivity" Therefore, since Hatano is directed toward an edge emitting device and as it is unnecessary for the electrode 722 to be reflective and most of the materials of the electrode 722 suggested by Hatano are of bad reflectivity of light, it is impossible for persons

skilled in the art to accomplish Applicants' claimed invention based on the disclosure of Hatano Accordingly, Applicants respectfully request that the rejection of claims 1 and 6 be withdrawn

With respect to the rejection of independent claim 8 and dependent claim 13 under 35 USC 103(a), Applicants claim a "**flip-chip light-emitting device**, comprising a first electrode and a second electrode wherein said first electrode **has good reflectivity of light** " Applicants note that the Office Action indicates that Hanato et al do not teach that the "**second** electrode has good reflectivity of light" (emphasis added) However, Applicants claim that the "**first** electrode has good reflectivity of light". For the purposes of this discussion, Applicants assume that the Office Action was intended to read "first electrode"

Hatano, as discussed, is directed to an **edge emitting device** and not a flip-chip light emitting device The illustration of FIGURE 4 of Hatano and corresponding description, as cited in the Office Action on page 3, second paragraph, are related to the edge-emitting semiconductor and not a light-emitting device as claimed As discussed above, the structure and electrodes of an edge-emitting semiconductor laser are different to that of the light-emitting device of the present invention In addition, the laser device illustrated in FIGURE 4 of Hatano is not a flip-chip device as claimed in independent claim 8 FIGURE 4 and related description do not disclose or teach Applicants' claimed invention of a "flip-chip light-emitting device wherein said first electrode has good reflectivity of light" Accordingly, Applicants respectfully request that the rejection of independent claim 8 and dependent claim 13 under 103(a) be withdrawn

Dependent claims 2-3 and 9-10 depend from independent claims 1 and 8, respectively, and should be allowable for at least the same reasons

Regarding the rejection of dependent claims 4-5 and 11-12 under 35 USC 103(a) as being unpatentable over Hatano in view of Okazaki, Applicants respectfully traverse the rejection

Okazaki teaches a base that has a first and second conductive portion respectively connected to the first and second electrodes of a light-emitting device However, Okazaki fails to disclose the features of Applicants' claimed invention (e.g., a "flip-chip light-emitting device wherein said second electrode has good reflectivity of light"). Neither Hatano nor Okazaki, taken alone or in combination, teaches or suggests Applicants' claimed invention Accordingly, Applicants respectfully request that the rejection of dependent claims 4-5 and 11-12 under 35 USC 103(a) be withdrawn

Regarding the rejection of dependent claims 7 and 14 under 35 USC 103(a) as being unpatentable over Hatano in view of JP 03263878A, Applicants respectfully traverse the rejection JP 03263878 relates to a photovoltaic device and not a "flip-chip light-emitting device" as claimed in both independent claims 1 and 8 from which claims 7 and 14 depend, respectively JP 03263878 merely discloses that an electrode can be made of ITO/Ag, which is only one embodiment of the electrode of Applicants' claimed invention Because JP 03263878 does not teach or disclose a "flip-chip light-emitting device" and combining Hatano with JP 03263878 does not result in Applicants' claimed invention, Applicants respectfully request that the rejection of dependent claims 7 and 14 be withdrawn for at least the same reasons as provided with regard to independent claims 1 and 8

In view of the above, it is believed that this application is in condition for allowance, and such a Notice is respectfully requested

Should the Examiner have any further questions or comments facilitating allowance, the Examiner is invited to contact Applicant's representative indicated below to further prosecution of this application to allowance and issuance

Respectfully submitted,

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Date 2/18/03

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